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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/717,413	11/21/2000	Owen H. Decker	FA0972 US NA	6493

23906 7590 01/17/2002

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
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WILMINGTON, DE 19805

EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 01/17/2002

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/717,413	Applicant(s) DECKER ET AL.	
	Examiner Callie E. Shosho	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claim 1 discloses a “low gloss powder coating composition”. The scope of the claim is confusing because it is not clear what is meant by “low”. What value must the gloss possess to be considered “low”?

(b) Claim 9, which depends on claim 5, recites “wherein the at least one thermosetting or thermoplastic resin is selected from the group consisting of...”. However, there is no recitation of a thermosetting or thermoplastic resin in claim 5.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b)

only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 1-2 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Maeda et al. (U.S. 6,190,787) taken in view of the evidence given in Dumain (U.S. 6,093,774).

Maeda et al. disclose a powder coating composition comprising epoxy resin and 0.05-20% spherical silica that has an average diameter of 0.5-50 μm and maximum diameter of 100 μm or less (col.2, lines 44-47, col.6, lines 9-18, and col.12, lines 39-41). Although there is no explicit disclosure that the coating composition has low gloss, it is well known, as found in Dumain, that silica is commonly incorporated into powder coating compositions in order to reduce gloss and produce a composition having a low gloss finish (col.1, lines 40-47).

In light of the above, it is clear that Maeda et al. anticipates the present claims.

5. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Tolliver et al. (U.S. 6,217,252) taken in view of the evidence given in *Encyclopedia of Polymer Science and Engineering*.

Tolliver et al. disclose a powder coating composition comprising a thermosetting or thermoplastic polymer such as acrylic polymer including epoxy-functional acrylic polymer, polyolefin including polyethylene and polypropylene, and epoxy resin and 5-35% spheroidal particle such as ceramic microsphere. There is also disclosed a method for adding the spheroidal particle to the powder coating composition (col.2, lines 42-53, col.7, lines 4-9, 35-36, 45-47, and 59, col.8, lines 3-4, 18, and 40, col.9, lines 45-47, col.10, lines 1-5 and 10-11, and col.12, lines

39-53). Although there is no explicit disclosure of the median particle diameter and the maximum particle diameter of the ceramic microsphere, it is well known, as found in *Encyclopedia of Polymer Science and Engineering* (page 789) that ceramic microspheres typically possess average particle size of 10-30 μm and maximum particle size of 5-60 μm . Given that Tolliver et al. disclose composition identical to that presently claimed including type and amount of microsphere, it is clear that the composition inherently possesses low gloss and that the method inherently reduces gloss as presently claimed.

In light of the above, it is clear that Tolliver et al. anticipates the present claims.

6. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Muthiah et al. (U.S. 6,017,640).

Muthiah et al. disclose low gloss powder coating composition comprising resin including unsaturated polyester and polyacrylates and ceramic, hollow glass, or resin microsphere. There is also disclosed a method of reducing gloss by adding the microsphere to the powder coating composition (col.6, lines 13-16 and col.13, lines 53-55 and 62-63). Based on the ingredients present in the composition (see col.20, lines 23-37), it is calculated that the composition comprises 0.08-50% microsphere. Although there is no explicit disclosure of the median particle diameter and the maximum particle diameter of the ceramic or hollow glass microsphere, it is well known, as found in *Encyclopedia of Polymer Science and Engineering* that ceramic microspheres typically possess average particle size of 10-30 μm and maximum particle size of 5-60 μm (page 789) while hollow glass microspheres possess average particle size of 10-200 μm and average particle diameter of greater than 15 μm (pages 791-792).

In light of the above, it is clear that Muthiah et al. anticipate the present claims.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Higuchi et al. (U.S. 6,207,296) disclose a powder coating composition comprising epoxy and spherical silica having an average particle size of 5-40 μm and maximum particle size of less than 74 μm , however, the silica is present in an amount of 70-90% which falls outside the scope of the present claims.

Malhotra (U.S. 5,665,505) disclose coating composition comprising binder such as polyester and microsphere, however, there is no disclosure that the coating is in the form of a powder as presently claimed.

Savin (U.S. 5,252,632) disclose powder coating composition comprising polymer such as acrylic polymer, epoxy, and polyester and microsphere, however, there is no disclosure of the median particle diameter or maximum particle diameter of the microspheres.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Application Number: 09/717,413

Page 6

Art Unit: 1714

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Callie Shosho
January 11, 2002

Callie E. Shosho
Examiner
Art Unit 1714